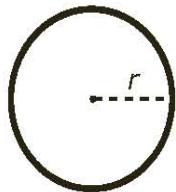


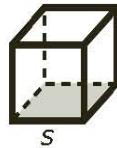
# PAWS Mathematics Reference Sheet

Use the information below as needed to answer questions on the mathematics test.

**Circle**

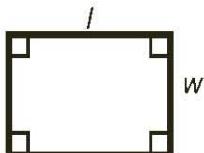
$$\text{Area} = \pi r^2$$

$$\begin{aligned}\text{Circumference} &= \pi d \\ &= 2\pi r\end{aligned}$$

**Cube**

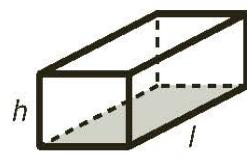
$$\text{Volume} = s^3$$

$$\text{Surface Area} = 6s^2$$

**Rectangle**

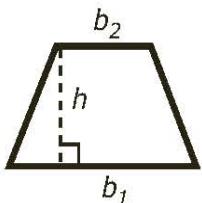
$$\text{Area} = lw$$

$$\begin{aligned}\text{Perimeter} &= 2l + 2w \\ &= 2(l+w)\end{aligned}$$

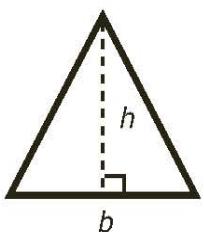
**Rectangular Prism**

$$\text{Volume} = lwh$$

$$\text{Surface Area} = 2(lw) + 2(hw) + 2(lh)$$

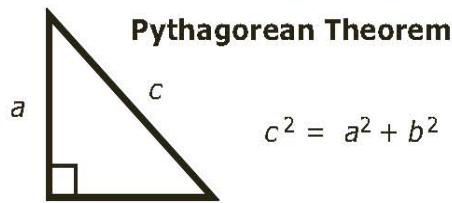
**Trapezoid**

$$\text{Area} = \frac{1}{2}(b_1 + b_2)h$$

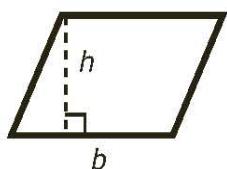
**Triangle**

$$\text{Area} = \frac{1}{2}bh$$

$$= \frac{bh}{2}$$

**Pythagorean Theorem**

$$c^2 = a^2 + b^2$$

**Parallelogram**

$$\text{Area} = bh$$

1 cup = 8 ounces	1 pint = 16 ounces
2 pints = 1 quart	8 pints = 1 gallon
4 quarts = 1 gallon	1 pound = 16 ounces
1 mile = 5,280 feet	
1 square foot = 144 square inches	
1 cubic foot = 1,728 cubic inches	
1 cubic meter = 1,000,000 cubic centimeters	

**Metric Units of Length**

1 kilometer	=	1,000	meters
1 hectometer	=	100	meters
1 dekameter	=	10	meters
1 meter	=	1	meter
1 decimeter	=	0.1	meter
1 centimeter	=	0.01	meter
1 millimeter	=	0.001	meter